

Application No. 10/643491
Reply to Office Action of September 27, 2005

Docket No.: 05899-00016-US

REMARKS

Applicant respectfully request reconsideration in view of the amendment and following remarks. Support for claims 28 and 38 can be found in cancelled claim 34. Support for newly added claims 39-41 can be found in the middle of page 5 of the specification. Support for newly added claims 42 can be found in cancelled claim 34. Support for newly added claims 43-47 can be found in the specification at the bottom of page 12 to the top of page 13.

Claims 28-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Southwick U.S. Patent No. 5,292,795 ("Southwick '795"). Claims 28-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Daniel U.S. Patent No. 5,461,104 ("Daniel"). Claims 28-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Southwick U.S. Patent No. 5,985,979 ("Southwick '979"). Claims 28-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartmann U.S. Patent No. 5,739,190 ("Hartmann"). The applicant respectfully traverses these rejections.

Southwick '795 discloses at col.3, lines 8-31,

The preferred base polymers of the present invention are block copolymers of conjugated dienes, acrylic monomers such as alkyl methacrylates or their derivatives and vinyl aromatic hydrocarbons. Such block copolymers may be multiblock copolymers of varying structures containing various ratios of the monomers including those containing up to about 60% by weight of vinyl aromatic hydrocarbon. At higher vinyl aromatic hydrocarbon contents, the polymers are not elastomeric and would not be useful for adhesives, sealants and flexible coatings. Thus, multiblock copolymers may be utilized which are linear or radial, symmetric or asymmetric, and which have structures represented by the formulae, ABAC, ABC, BC, BAC, CABAC, CBC, (CB)_nX, (BC)_nX, (CB)_nXA_m, (BC)_nXA_m, (CB)_nXB_m, (BC)_nXB_m, etc. where A is the vinyl aromatic hydrocarbon, B is the diene, C is the acrylic monomer, X is a coupling agent and n and m are integers from 1 to 50. These are just some of the structures possible. Their finite number is not meant to limit

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the scope of the invention. It is not necessary but B can be a polymer block of a conjugated diene that has been hydrogenated. Hydrogenation of the diene is preferred in applications requiring superior thermal stability. (emphasis added)

Southwick '795 does not disclose an AB block copolymer which consists of the structures according to the pattern AB, ABA or BAB as is required by the applicant's independent claims. For the above reasons, Southwick '795 does not anticipate the applicant's claimed invention and actually teaches away from the applicant's claimed invention.

Daniel is related to a process for producing fine stable latexes of block copolymers with an average particle size less than 1 micron (see col. 1, lines 7-10 (Background of the Invention), col. 2, lines 15-17 (Summary of the Invention) and claim 1).

The applicant's claimed invention is directed to a microemulsion (claim 28) and a method for increasing the efficiency of surfactants (claim 38). The applicant does not believe that Daniel is related to the applicant's claimed invention.

Claims 30 and 39-41 are further removed from Daniel, because Daniel does not teach the applicant's claim pattern of AB or BAB.

Southwick '979 is related to a process for producing stable polymer latexes with a non-migrating polymeric stabilizer (see col. 1, lines 4-6 (Background of the Invention), col. 2, lines 9-10 (Summary of the Invention) and claim 1). Southwick '979 then discloses "[t]he cement is then emulsified in an aqueous solution which need not contain a conventional surfactant."

The applicant's claimed invention is directed to a microemulsion (claim 28) and a method for increasing the efficiency of surfactants (claim 38). The applicant does not believe that Southwick '979 is related to the applicant's claimed invention.

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Claims 30 and 39-41 are further removed from Southwick '979 because Southwick '979 does not teach the applicant's claim pattern of AB or BAB.

Hartmann does not disclose nor teach the applicant's said AB block copolymer consists of the structures according to the pattern AB, ABA or BAB having a water-soluble block A and a water-insoluble block B and wherein block B polymer is a polydiene or an at least partially hydrated polydiene (see claim 28).

In addition, Hartmann does disclose a method for increasing the efficiency of surfactants through the admixture of additives having a water-soluble fraction and a water-insoluble fraction, characterized in that an AB block copolymer and said AB block copolymer consists of the structures according to the pattern AB, ABA or BAB and having a water-soluble block A and a water-insoluble block B is admixed as the additive (see applicant's claim 38). For the above reasons, this rejection should be withdrawn.

In addition, the applicant does not believe that the applied prior art teaches or discloses the embodiments of claims 43-47.

With respect to obviousness, the Examiner will note from Figures 2-10 as well as 13 and 14, the efficiency of the microemulsions will grow at least about factor 2 because the "fishtailpoint" (=peak of the curves) will displace to lower values γ . This enormous effect will not be expected as a result of the features of the claimed invention.

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Studying the applied prior art, the person of ordinary skill in the art will have no consideration to apply a substance claimed in claim 38 to increase the efficiency about a factor 2 or more. So the result is surprisingly and an inventive step is given.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

A three month extension fee has been paid. Applicant believes no additional fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 05899-00016-US from which the undersigned is authorized to draw.

Respectfully submitted,

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